## REMARKS

Claims 1-13, and 15-18 stand rejected under the judicially-created doctrine of obviousness-type double patenting as being unpatentable over the claims of U.S. Patent No. 6,748,677. Further, claims 1, 5-9, and 16-18 stand rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 6,050,006 to Swindle ("Swindle"). Finally, claims 1-13, 15, 17, and 18 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 5,638,615 to Korsen ("Korsen") in view of either Swindle, U.S. Patent No. 2,192,150 to Pierce ("Pierce"), or U.S. Patent No. 1,970,254 to Sullivan ("Sullivan").

Prior to entry of this Amendment, claims 1-13, and 15-18 are pending in the application. Claims 1 and 8 are the independent claims under consideration. Applicants hereby amend claims 8 and 11, as well as add new dependent claim 19, to more particularly point out and distinctly claim the subject matter of the invention. No new matter has been introduced by these amendments; support for the amendment to claim 8 and new claim 19 being found throughout the specification, for example, in paragraphs [0048], [0053], and [0054], and support for the amendment to claim 11 being found in claim 9, as originally filed.

In view of the above amendments and following remarks, reconsideration and withdrawal of all grounds of rejection are respectfully requested.

- 1. Claims 1-13, and 15-18 stand rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over the claims of U.S. Patent No. 6,748,677. This double-patenting rejection is overcome by a terminal disclaimer in compliance with 37 C.F.R 1.321(c), filed herewith.
- 2. Claims 1, 5-9, and 16-18 stand rejected under 35 U.S.C. §102(b) as being anticipated by Swindle. Applicants respectfully traverse this rejection.

Briefly, Swindle appears to disclose a shoe that, in one embodiment, includes an outer sole and a female receptacle having the opening. The receptacle is embedded within the outer sole and, preferably, affixed to the outer sole by a glue or other adhesive. A removable base includes a member shaped to pass through the opening in the receptacle. Furthermore, an

optional seat is located in the receptacle opposite the opening for engaging the member when inserted in the opening. In use, the member is rotated within the receptacle until it is misaligned with the opening, and is held in place by the engaging action of the seat, until rotated again for removal. See Swindle, col. 1, line 66 to col. 2, line 7 and col. 4, lines 1-3, 35-36, and 66-67.

In order for a claim to be anticipated under 35 U.S.C. § 102(b), each and every limitation of the claim must be found in a single reference. Applicants respectfully submit that Swindle fails to meet this exacting standard with respect to independent claims 1 and 8 and any claim that depends either directly or indirectly therefrom.

Specifically, Applicants' claim 1 recites a method for manufacturing a sole that includes "providing at least one receptacle" and "forming a sole body around the at least one receptacle". Also, Applicants' claim 8, as amended, recites a sole that includes "a bottom surface defining a stud base having a sidewall" and a receptacle "including a flexible wall and a first locking member disposed on an internal surface of the flexible wall."

Applicants' method claims 1 and 5-7, as well as sole claims 8-9 and 16-18, at least because Swindle does not teach or suggest each of the above limitations. Specifically, with respect to claims 1 and 5-7, in contrast to Applicants' claimed invention, Swindle discloses embedding the receptacle within the premanufactured outer sole and either affixing the receptacle to the sole by an adhesive or securing it between the sole and the rest of the shoe by a flange or other fastening mechanism, or by other techniques, such as welding or bonding. See Swindle, col. 4, line 1-6. Thus, in Swindle, the sole is not fabricated by forming a sole body around at least one receptacle, as claimed by Applicants in independent method claim 1.

Turning to sole claim 8, as amended, Applicants respectfully submit that Swindle's resilient seat (34), identified in the Office action as a source of teaching of the claimed locking member, is <u>not</u> disposed on an internal surface of a flexible wall of the receptacle. Instead, the seat is merely located in the top portion of Swindle's receptacle (14) opposite the opening and, in two separate embodiments, secured to either the shoe <u>itself</u> or to a top wall of the receptacle that

is in turn affixed to the shoe. Applicants note that Swindle is completely silent about physical properties of the top wall. See Swindle, col. 4, lines 17-25.

Moreover, Applicants note that, in Swindle, locking the engaging member (24) in the receptacle (14) is accomplished by the <u>combination</u> of:

- structural misalignment, caused by turning the member (24) out of alignment with the opening (16) so that the top of the member rests against the bottom wall (28) of the receptacle; and
- pressure and/or friction on member (24) caused by the <u>optional</u> resilient seat (34).

In fact, Swindle expressly discloses that the seat is not necessary and that its engaging function can be served, under certain conditions, merely by the bottom of the shoe or a top wall of the receptacle. See Swindle, col. 3, lines 52-65, and col. 4, lines 26-40.

In sum, Swindle discloses a conventional bayonet-style retention scheme (i.e. insert and rotate) to retain the base in the sole. The purpose of the seat appears to be preventing inadvertent rotation and release of the base during use. Thus, Applicants respectfully submit that Swindle does not teach or suggest a <u>single</u> structure that would engage the fastening projection of the stud and serve as a locking member in the manner that term is used in Applicants' claims.

Thus, Swindle does not teach or suggest a method for manufacturing a sole that includes "providing at least one receptacle" and "forming a sole body around the at least one receptacle," as recited in claim 1. Swindle also does not teach or suggest a sole that includes "a bottom surface defining a stud base having a sidewall" and a receptacle "including a flexible wall and a first locking member disposed on an internal surface of the flexible wall," as recited in claim 8, as amended.

Accordingly, Applicants respectfully submit that independent claims 1 and 8, as amended, are allowable over Swindle. Because claims 5-7, 9, and 16-18 depend, either directly or indirectly, from independent claims 1 and 8, and include all of the limitations thereof, Applicants respectfully submit that these claims are allowable as well. Reconsideration and

withdrawal of the rejection of claims 1, 5-9, and 16-18 under 35 U.S.C. §102(b) based on Swindle are respectfully requested.

3. Claims 1-13, 15, 17, and 18 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Korsen in view of either Swindle, Pierce, or Sullivan. Applicants respectfully traverse this rejection.

Briefly, Korsen appears to disclose a shoe spike apparatus that, in one embodiment, includes a metal socket with a circular snap ring provided therein. The snap ring is made from flexible steel and, together with the socket, is inserted in an opening formed in the sole and welded to an anchor plate embedded in the outer sole or between the outer sole and the rest of the shoe. When a base portion of a stud to be mounted is inserted, the snap ring is expanded until it snaps into an annular groove of the base portion and thereby fastens the stud. See Korsen, col. 2, line 28 to col. 3, line 8. In another embodiment, Korsen's shoe spike apparatus includes a socket also inserted in the opening formed in the sole and welded to an anchor plate embedded in the outer sole or between the outer sole and the rest of the shoe. The socket contains a spring retainer that includes a plurality of convex spring fingers disposed around the perimeter of the opening, each having a concave section. When the base portion of the stud is inserted into the spring retainer, the spring fingers expand outwardly until a convex ring of the stud's base portion snaps into an annular groove formed by the concave sections of the fingers and thereby fastens the stud. See Korsen, col. 3, line 55, to col. 4, line 47.

To establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and not based on applicant's disclosure. In re Vaeck, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). MPEP § 706.02(j).

Applicants respectfully submit that a prima facie case of obviousness is not established with respect to claims 1-13, 15, 17, and 18, because neither Korsen nor Swindle, Pierce, or Sullivan, alone or in proper combination, teach or suggest all the limitations of these claims.

Specifically, Applicants' claim 1 recites a method for manufacturing a sole that includes "providing at least one receptacle forming a cavity for receiving a stud including a generally oblong fastening projection" and "forming a sole body around the at least one receptacle". Also, Applicants' claim 8, as amended, recites a sole that includes a receptacle disposed at least partially within the stud base and "forming an inseparable direct bond at least with the sidewall of the stud base," and a stud with a fastening projection "having a generally oblong shape."

## Claims 1-7

First, with respect to claim 1 and all claims depending therefrom, Applicants note that Korsen discloses affixing (e.g., welding) the socket to the anchor plate that is embedded either within the outer sole or between the outer sole and the shoe base. Thus, in Korsen, the socket is attached within the premanufactured outer sole. In sharp contrast to Applicants' claimed invention, the sole is <u>not</u> fabricated by forming a sole body around at least one receptacle.

Turning to Swindle, Pierce, and Sullivan, Applicants respectfully submit that each of these references fails to cure the deficiency of Korsen with respect to independent claim 1 because, just like in Korsen, outer soles disclosed in Swindle, Pierce, or Sullivan are not fabricated by forming a sole body around at least one receptacle. Each of these references in combination with Korsen, therefore, also does not teach or suggest a method for manufacturing a sole that includes "forming a sole body around the at least one receptacle," as required by Applicants' claims.

Further, Applicants respectfully submit that claims 1-7 are nonobvious over Korsen in combination with either Swindle, Pierce, or Sullivan, because there is no suggestion to combine Korsen with any of the secondary references in the manner suggested in the Office action to arrive at the claimed invention. Moreover, the proposed combinations result in Korsen being inoperable for its intended purpose.

Specifically, the Office action recognizes on page 3 that Korsen does not teach or suggest "the exact shape of the fastening projection," but asserts that "it would have been obvious to shape the projection as oblong as taught by either Swindle, Pierce, or Sullivan in the shoe of Korsen to provide a more stable connection that won't easily rotate during use." While the secondary references cited in the Office action disclose a non-circular fastening projection, Applicants respectfully submit that Korsen not only fails to teach or suggest a generally oblong shape of the stud's fastening projection recited in claim 1-13, 15, 17, and 18, but explicitly teaches away from such shape by requiring a circular cross-section of the socket and the stud member's base. Specifically, Korsen emphasizes that "circular construction allows complete and free rotation of spike member 50 within socket to eliminate tearing of the anchor plate from the sole, which often results where rotation of the spike member is not possible." See Korsen, col. 3, lines 1-5.

As a matter of law, a reference is said to teach away when a person of ordinary skill, on reading the reference, would be discouraged from following the path set out in the reference, or would be led in a direction divergent from the path the applicant took. <u>In re Gurley</u>, 31 USPQ 2d 1130, 1131 (Fed. Cir. 1994). In addition, an invention is nonobvious over the prior art when the proposed combination results in one of the patent references being inoperable for its intended purpose. <u>Tec Air, Inc. v. Denso Mfg. Mich. Inc.</u>, 52 USPQ 2d 1294, 1298 (Fed. Cir. 1999) (quoting In re Sponnoble, 160 USPQ 237, 244 (C.C.P.A. 1969)).

As mentioned above, Korsen expressly prescribes circular, and only circular, construction of the stud-retaining receptacle and the stud itself, to avoid structural damage to the shoe. Accordingly, Korsen not only lacks any motivation for, but also teaches away from, a combination with either Swindle, Pierce, or Sullivan to obtain, as the Office action states on page 4, a stud having an oblong-shaped non-rotatable projection. Moreover, the proposed combination renders Korsen inoperable for its intended purpose, because, as Korsen explicitly recognized, including non-rotatable spike members in its shoe may result in <u>tearing of the</u> anchor plate from the sole.

For at least these reasons, Applicants respectfully submit that independent claim 1 is patentable over Korsen in view of either Swindle, Pierce, or Sullivan. Because claims 2-7 depend, either directly or indirectly, from independent claim 1, Applicants respectfully submit that these claims are patentable as well. Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejection of claims 1-7 under 35 U.S.C. § 103(a) as being unpatentable over Korsen in view of either Swindle, Pierce, or Sullivan.

## Claims 8-13, 15, 17, and 18

First, as discussed above, Korsen not only lacks any motivation for, but also teaches away from, a combination with either Swindle, Pierce, or Sullivan to obtain "a stud with a fastening projection having a generally oblong shape," as recited in claim 8, as amended, and all claims depending therefrom. Moreover, the proposed combination renders Korsen inoperable for its intended purpose, because, as Korsen explicitly recognized, including non-rotatable spike members in its shoe may result in tearing of the anchor plate from the sole.

Second, as also discussed above, Korsen discloses affixing the metal sockets to the metal anchor plate embedded either within the outer sole or between the outer sole and the shoe base. In Korsen, the sockets are inserted into and secured within the openings formed in the <a href="maintenance-premanufactured">premanufactured</a> outer sole. As mentioned above, in sharp contrast to Applicants' claimed invention, the sole is <a href="maintenance-premanufactured">not</a> fabricated by forming a sole body around at least one receptacle. Conversely, in Korsen, a configuration of the sidewalls of the openings in the outer sole is not defined by the sockets. Accordingly, Korsen does not teach or suggest a sole that includes a bottom surface defining a stud base having a sidewall and a receptacle disposed at least partially within the stud base, "a configuration of the sidewall being at least partially defined by the receptacle," as required by Applicants' claims.

Turning to Swindle, Pierce, and Sullivan, Applicants respectfully submit that each of these references fails to cure the deficiency of Korsen with respect to independent claim 8, as amended, because, just like in Korsen, outer soles disclosed in Swindle, Pierce, or Sullivan are not fabricated by forming a sole body around at least one receptacle, and, therefore, none of these

references teaches or suggests defining a configuration of the sidewall of the opening in the sole at least partially by the receptacle.

Each of these references in proper combination with Korsen, therefore, also does not teach or suggest a sole that includes a bottom surface defining a stud base having a sidewall and a receptacle disposed at least partially within the stud base, "a configuration of the sidewall being at least partially defined by the receptacle," and a stud with a fastening projection "having a generally oblong shape," as required by Applicants' claims.

For at least these reasons, Applicants respectfully submit that independent claim 8, as amended, is patentable over Korsen in view of either Swindle, Pierce, or Sullivan. Because claims 9-13, 15, 17, and 18 depend, either directly or indirectly, from independent claim 8, Applicants respectfully submit that these claims are patentable as well. Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejection of claims 8-13, 15, 17, and 18 under 35 U.S.C. § 103(a) as being unpatentable over Korsen in view of either Swindle, Pierce, or Sullivan.

4. With respect to the newly-added dependent claim 19, Applicants note that neither Korsen nor Swindle, Pierce, or Sullivan, or any other reference of record, either alone or in proper combination, teach or suggest all the limitations of this claim.

Specifically, as discussed above, Korsen discloses affixing the metal sockets to the metal anchor plate embedded either within the outer sole or between the outer sole and the shoe base. In view of Korsen's all-metal construction, Korsen does not suggest forming, nor does Korsen need to form, any other bonds between its sockets and the sole. The required retention is afforded by the anchor plate, even in polymer socket/anchor plate constructions. Also, with respect to Swindle, Applicants note that Swindle's receptacle is affixed to the outer sole by an adhesive, rather than forming an inseparable direct bond therewith, as claimed by Applicants.

5. Applicants appreciate the notification on page 4 of the Office action that a copy of the foreign priority document, specifically, German Application No. DE 1 024 8482.1, has

Application Serial No. 10/688,793 Reply to Office action dated January 27, 2005

not yet been received by the Patent Office. A certified copy of the priority document will be submitted shortly.

## **CONCLUSION**

In view of the foregoing, Applicants respectfully request reconsideration, withdrawal of all grounds of rejection, and allowance of claims 1-13 and 15-18, as well as newly-added claim 19, in due course. The Examiner is invited to contact Applicants' undersigned representative by telephone at the number listed below to discuss any outstanding issues.

Date: April 26,2005

Tel. No. (617) 570-1352 Fax No. (617) 523-1231

2402598

Respectfully submitted,

Mark L. Beloborodov, Reg. No. 50,773

Attorney for Applicants Goodwin | Procter LLP

Exchange Place, 53 State Street

Boston, MA 02109